

**Notice of Allowability**

Application No.

09/554,219

Applicant(s)

NINOMIYA ET AL

Examiner

Art Unit

Paulos M. Natnael

2614

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE and amendment filed 4/15/05.
2. ☒ The allowed claim(s) is/are 2,3,5,6,8,11, renumbered as 1-6.
3. ☒ The drawings filed on 11 May 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

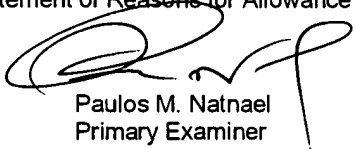
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
Paulos M. Natnael  
Primary Examiner  
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## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 2,3,5,6,8, and 11 are allowable over the prior art.
2. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose a demodulator, being an apparatus for receiving digital broadcast by transmitting digital video and audio information coded by digital VSB modulation system in packet form, *comprising, a circuit for establishing a synchronous signal in reception data based on a polarity of the most significant bit (MSB) of the reception transport packet data*, wherein the circuit for establishing the synchronous signal in reception data comprises: a synchronous code pattern detecting circuit for detecting the segment synchronous code pattern from the most significant bit signal of the reception packet data, a symbol number counter for counting the number of symbol data in the reception packet data, a synchronous detection circuit for judging the true segment synchronous code pattern by obtaining the segment synchronous code pattern from said synchronous code pattern detecting circuit when said symbol number counter finishes counting of a specified number, and a synchronism detection protection counter for detecting and establishing the segment synchronous signal in the reception data from the output of said synchronous code pattern detecting circuit and count-up of specified number of said symbol number counter, as in claim 2; a digital broadcast demodulator for receiving digital broadcast by transmitting digital video and audio information coded by digital VSB modulation system in packet format, wherein a

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differential value of synchronous signals of reception packet data is determined so as to detect a clock phase error of transmission data, and a clock signal is regenerated by phase control on the basis of the clock phase error, a subtracting circuit for subtracting the N-th input from the N+1th input of all reception data, a circuit for outputting the subtraction input value obtained in the step above, only for the data coinciding with a code pattern of segment synchronous signal, a circuit for outputting the subtraction input value obtained in step (b) as a clock phase error signal only for the data positioned at the segment synchronous signal, wherein only the phase errors of a second symbol and a third symbol or a first symbol and a fourth symbol of said segment synchronous signal are outputted as said clock phase error, as in claim 6;

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paulos M. Natnael  
Primary Examiner  
Art Unit 2614

June 16, 2005